SA-WX700

SERVICE MANUAL

Ver 1.3 2004.06

US Model
Canadian Model
AEP Model
UK Model

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS
For the U.S.A. model
POWER OUTPUT AND TOTAL HARMONIC DISTORTION:
With 3 ohm loads, from 20 – 200 Hz; rated 200 watts, minimum RMS power, with no more than 0.8 % total harmonic distortion from 250 milliwatts to rated output.

System
Type
Active Subwoofer, magnetically shielded (closed cabinet)

Speaker units
Woofer : 25 cm dia. (10 in.), cone type x 2

Continuous RMS output
North American model
(3 ohms/100Hz, 0.8%) : 250 W
European model (DIN 3 ohms/100Hz, 0.7%) : 250 W

RMS output
Other models (3 ohms/100Hz, 10%) : 350 W

Reproduction frequency range
20 Hz - 200 Hz

High frequency cut-off frequency
50 Hz - 200 Hz

Phase selector
NORMAL, REVERSE

Inputs
Input jacks
LINE IN: input pin jack
SPEAKER IN: input terminals

Output jacks
LINE OUT: output pin jack
SPEAKER OUT: output terminals

General
Power requirements
US, Canadian models : 120 V AC, 60 Hz
AEP model : 230 - 240 V AC, 50/60 Hz
UK model : 230 - 240 V AC, 50/60 Hz

Power consumption
70 W
less than 0.5 W (Standby mode)

Dimensions
Approx. 390 x 490 x 480 mm
(15 $^{3}/_{8}$ x 19 $^{3}/_{8}$ x 19 in.) (w/h/d)

Mass
24 kg (52lb 15oz)

Supplied accessories
Audio connecting cord
(1 phono plug - 1 phono plug) (1)
Speaker cords (2)

Design and specifications are subject to change without notice.

ACTIVE SUBWOOFER

9-877-137-04
2004F02-1
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Sony Corporation
Home Audio Company
Published by Sony Engineering Corporation

SONY®

SAFETY CHECK-OUT
(US model)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer: Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE

The AC leakage from any exposed metal part to earth Ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.

2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

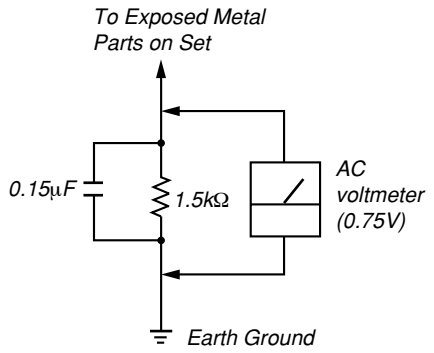

Fig. A. Using an AC voltmeter to check AC leakage.

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SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

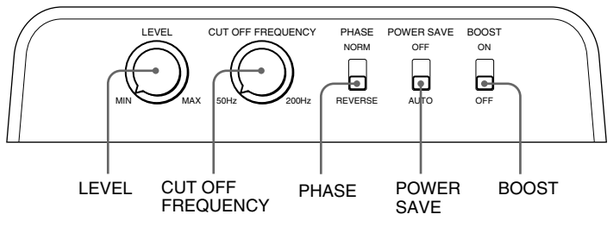
ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

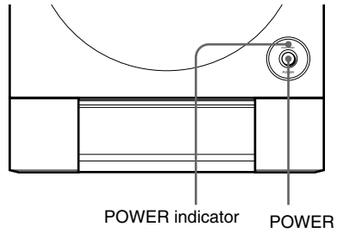
LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1
GENERAL

This section is extracted from instruction manual.

• **Location of controls**





SECTION 2
DIAGRAMS

THIS NOTE IS COMMON FOR SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For Schematic Diagrams.
Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▭ : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- ▬▬ : B+ Line.
- ▬ ▬ ▬ : B– Line.
- Voltages are dc with respect to ground under no-signal conditions.
- no mark : Power on
- Voltages are taken with a VOM (Input impedance 10 MΩ).
  Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : AUDIO
- Abbreviation
  CND : Canadian model

For printed wiring boards.
Note:

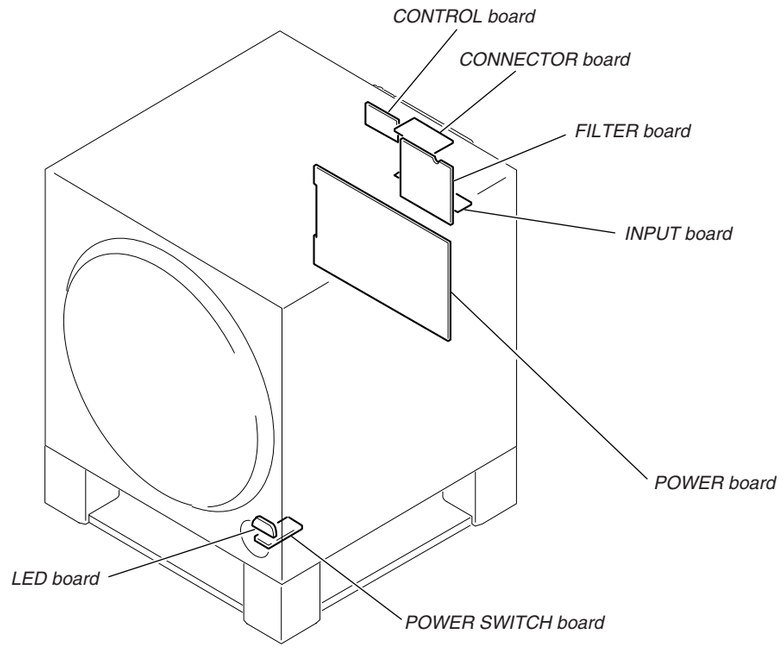
- ■ : parts mounted on the conductor side.
- o—— : parts extracted from the component side.
- ▬ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

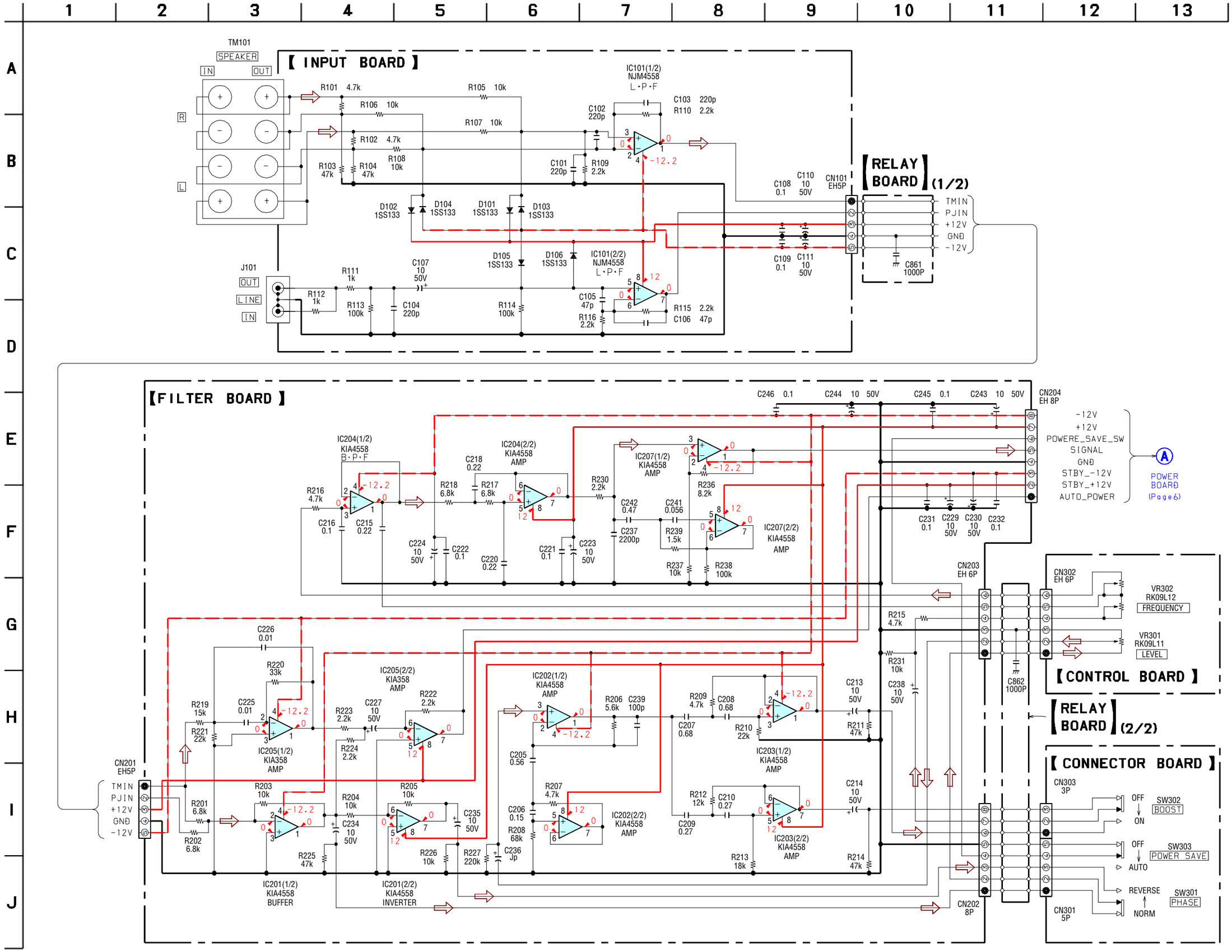
Caution:	
Pattern face side: (Conductor B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component A)	Parts on the parts face side seen from the parts face are indicated.

- Abbreviation
  CND : Canadian model

2-1. CIRCUIT BOARDS LOCATION

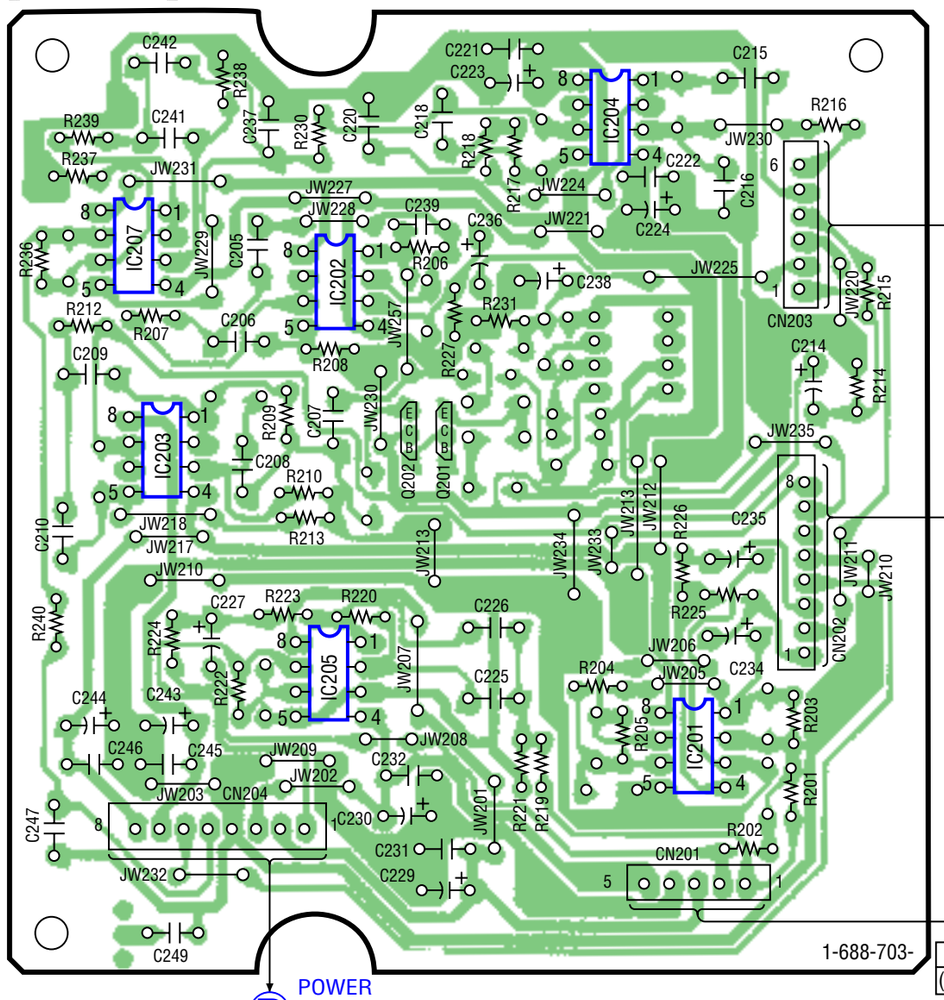


2-2. SCHEMATIC DIAGRAM –FILTER SECTION –

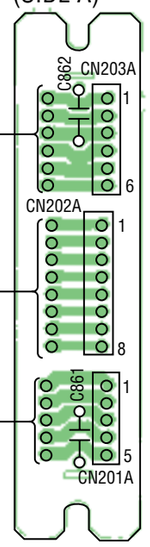


2-3. Printed Wiring Board – FILTER SECTION – • See page 3 for Circuit Boards Location.

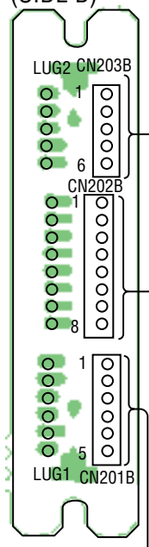
【FILTER BOARD】



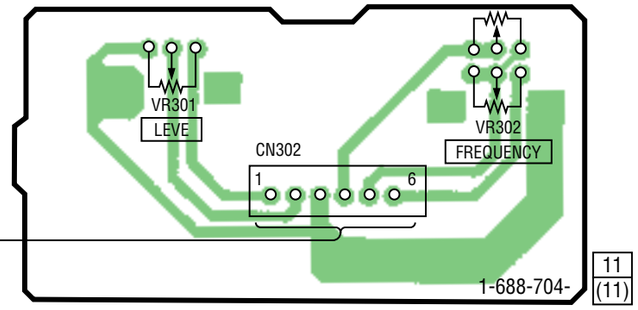
【RELAY BOARD】 (SIDE A)



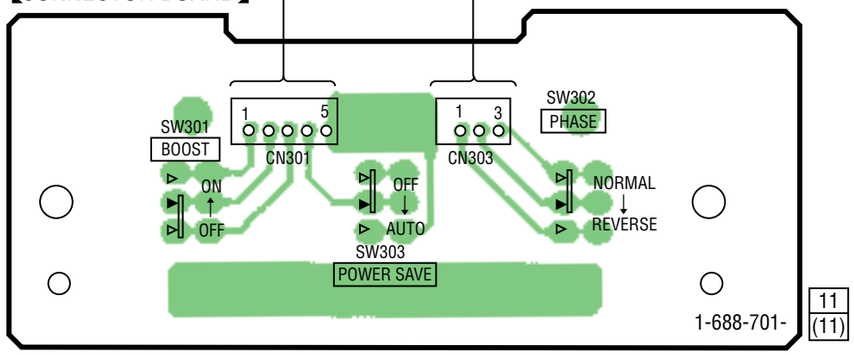
【RELAY BOARD】 (SIDE B)



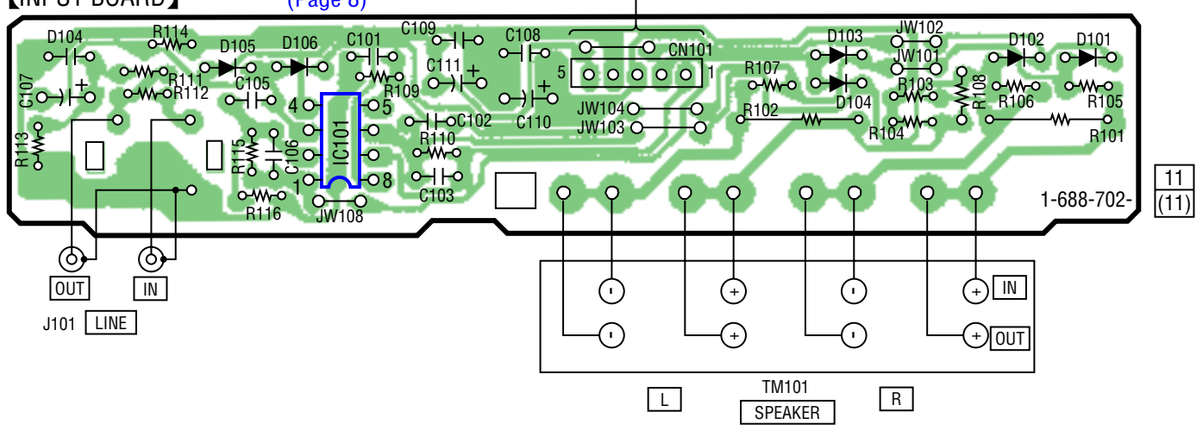
【CONTROL BOARD】



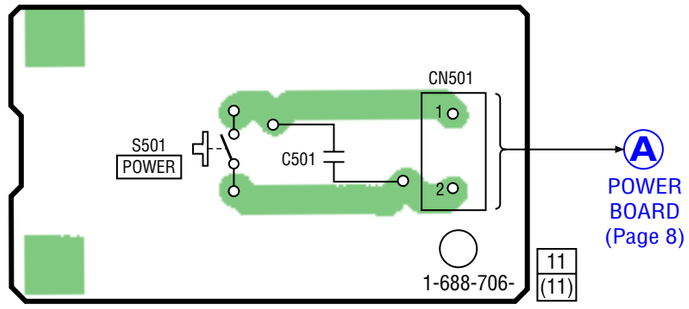
【CONNECTOR BOARD】



【INPUT BOARD】



【POWER SWITCH BOARD】



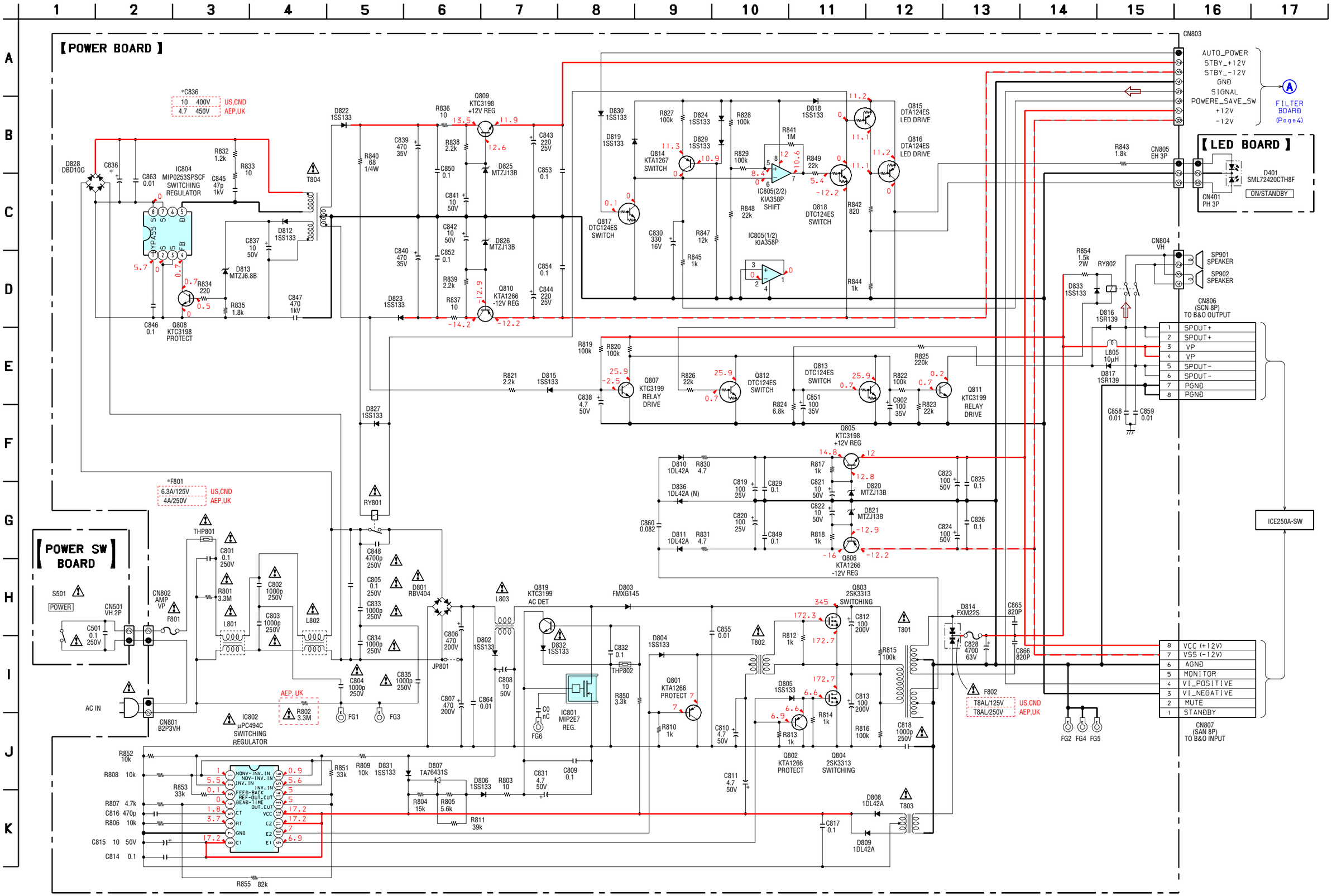
Ⓑ POWER BOARD (Page 8)

Ⓐ POWER BOARD (Page 8)

• **Semiconductor Location**

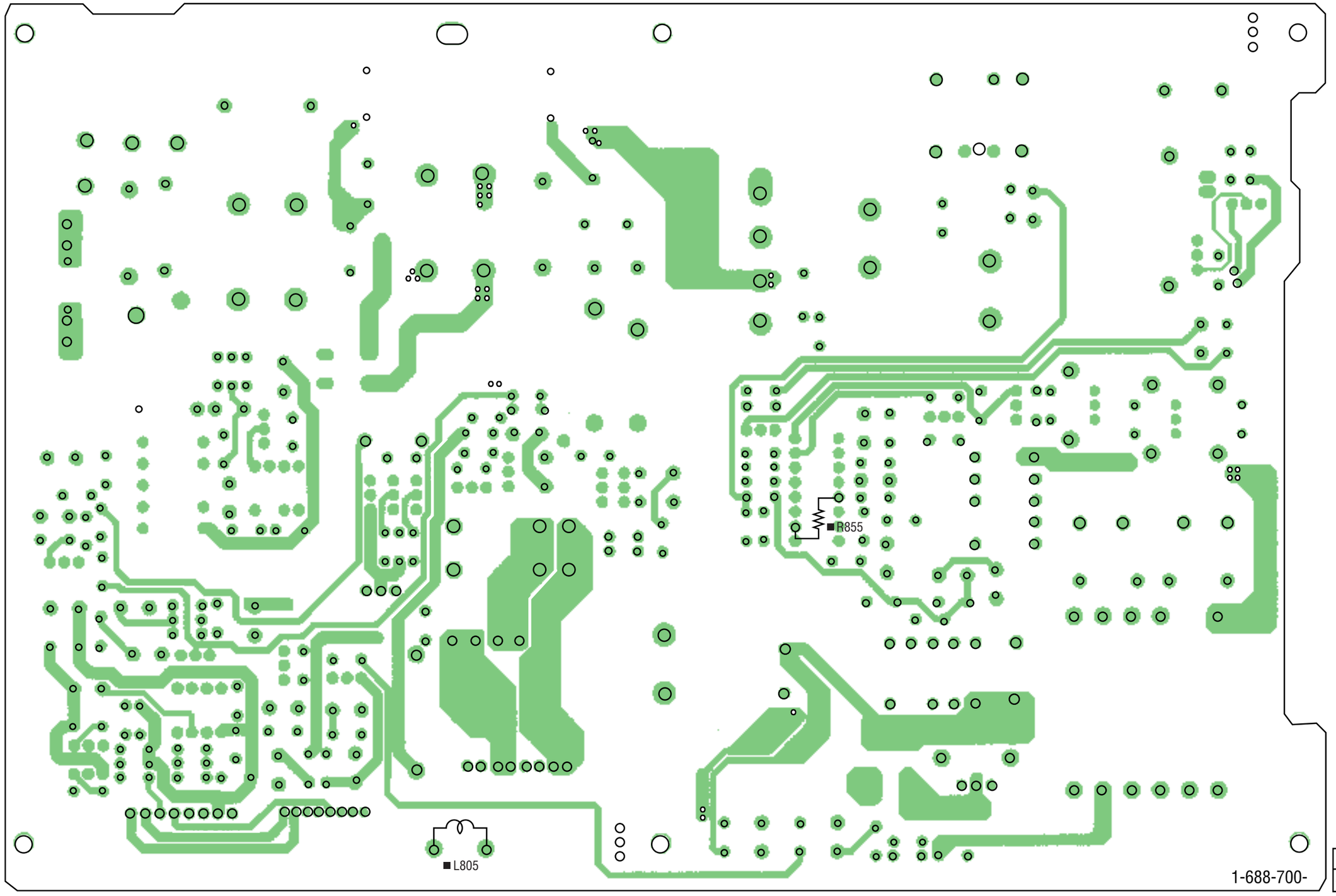
Ref. No.	Location
D101	E-5
D102	E-5
D103	E-4
D104	E-4
D105	E-2
D106	E-2
IC101	F-2
IC201	D-4
IC202	B-2
IC203	C-1
IC204	A-3
IC205	D-2
IC207	B-1

2-4. SCHEMATIC DIAGRAM –POWER SECTION –



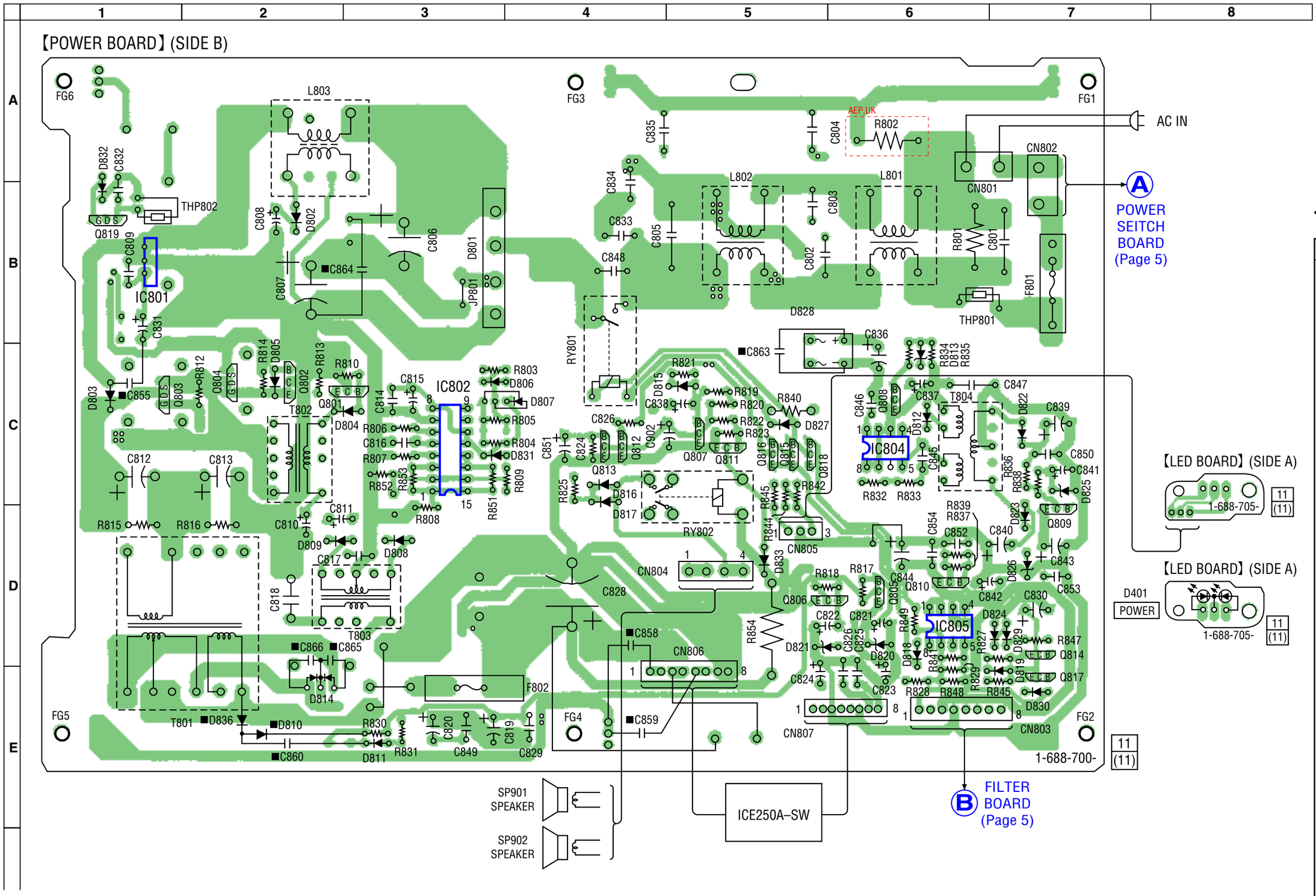
2-5. Printed Wiring Board – POWER SECTION (SIDE A) – • See page 3 for Circuit Boards Location.

【POWER BOARD】(SIDE A)



2-6. Printed Wiring Board – POWER SECTION (SIDE B) – • See page 3 for Circuit Boards Location.

【POWER BOARD】(SIDE B)



• **Semiconductor Location**

Ref. No.	Location
D401	D-8
D801	B-3
D802	B-2
D803	C-1
D804	C-3
D805	C-2
D806	C-4
D807	C-4
D808	D-3
D809	D-2
D810	E-2
D811	E-3
D812	C-6
D813	C-6
D814	E-2
D815	C-5
D816	C-4
D817	C-4
D818	D-6
D819	E-7
D820	D-6
D821	D-5
D822	C-7
D823	D-7
D824	D-7
D825	C-7
D826	D-7
D827	C-5
D828	B-5
D829	D-7
D830	E-7
D831	C-3
D832	A-1
D833	D-5
D836	E-2
IC801	B-1
IC802	C-3
IC804	C-6
IC805	D-6
Q801	C-2
Q802	C-2
Q803	C-1
Q804	C-2
Q805	D-6
Q806	D-5
Q807	C-5
Q808	C-6
Q809	D-7
Q810	D-6
Q811	C-5
Q812	C-4
Q813	C-4
Q814	D-7
Q815	C-5
Q816	C-5
Q817	E-7
Q818	C-5
Q819	B-1

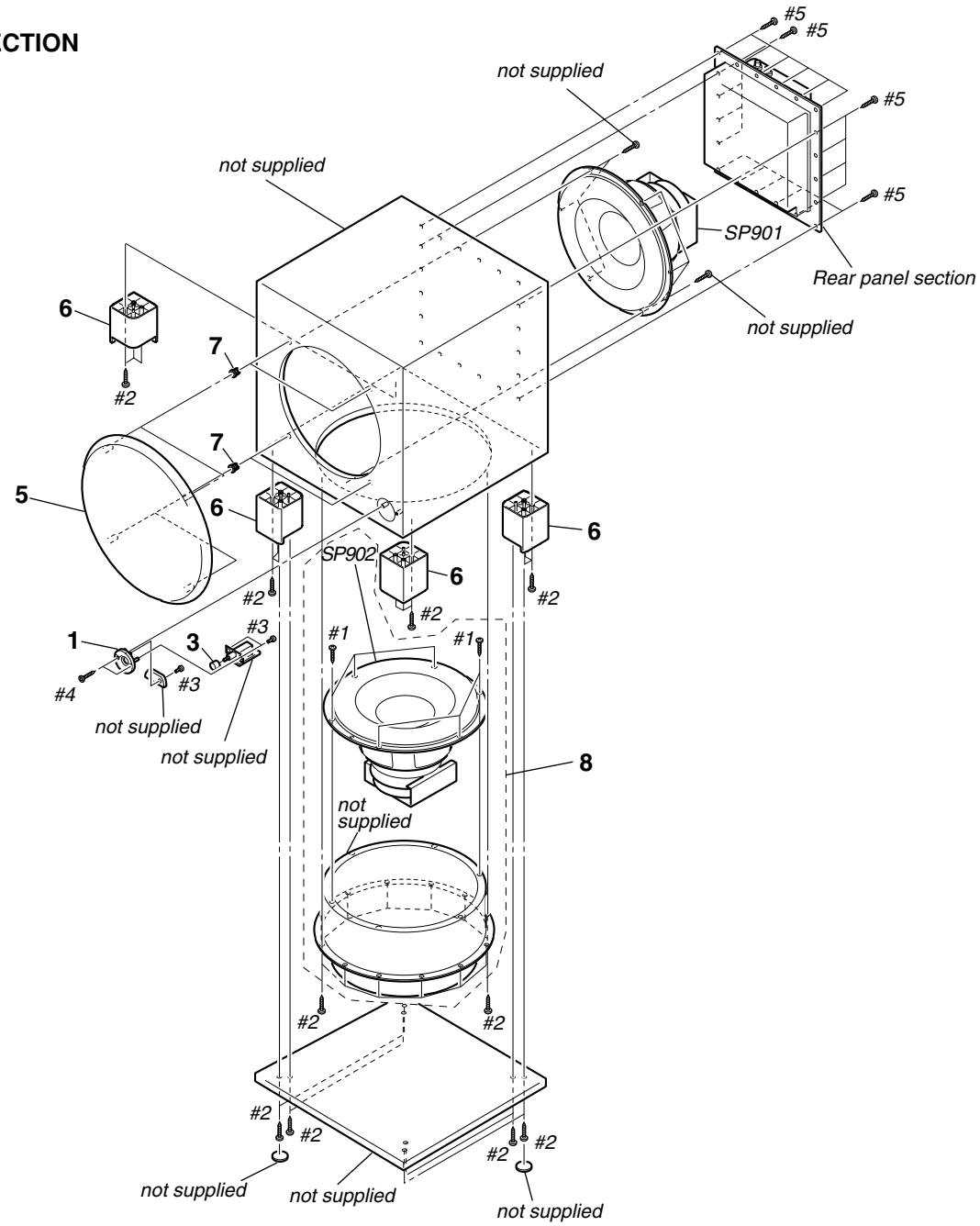
SECTION 3
EXPLODED VIEWS

NOTE :
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Color indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) … (RED)
  ↑ ↑
  Parts color Cabinet's color
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
  CND : Canadian model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

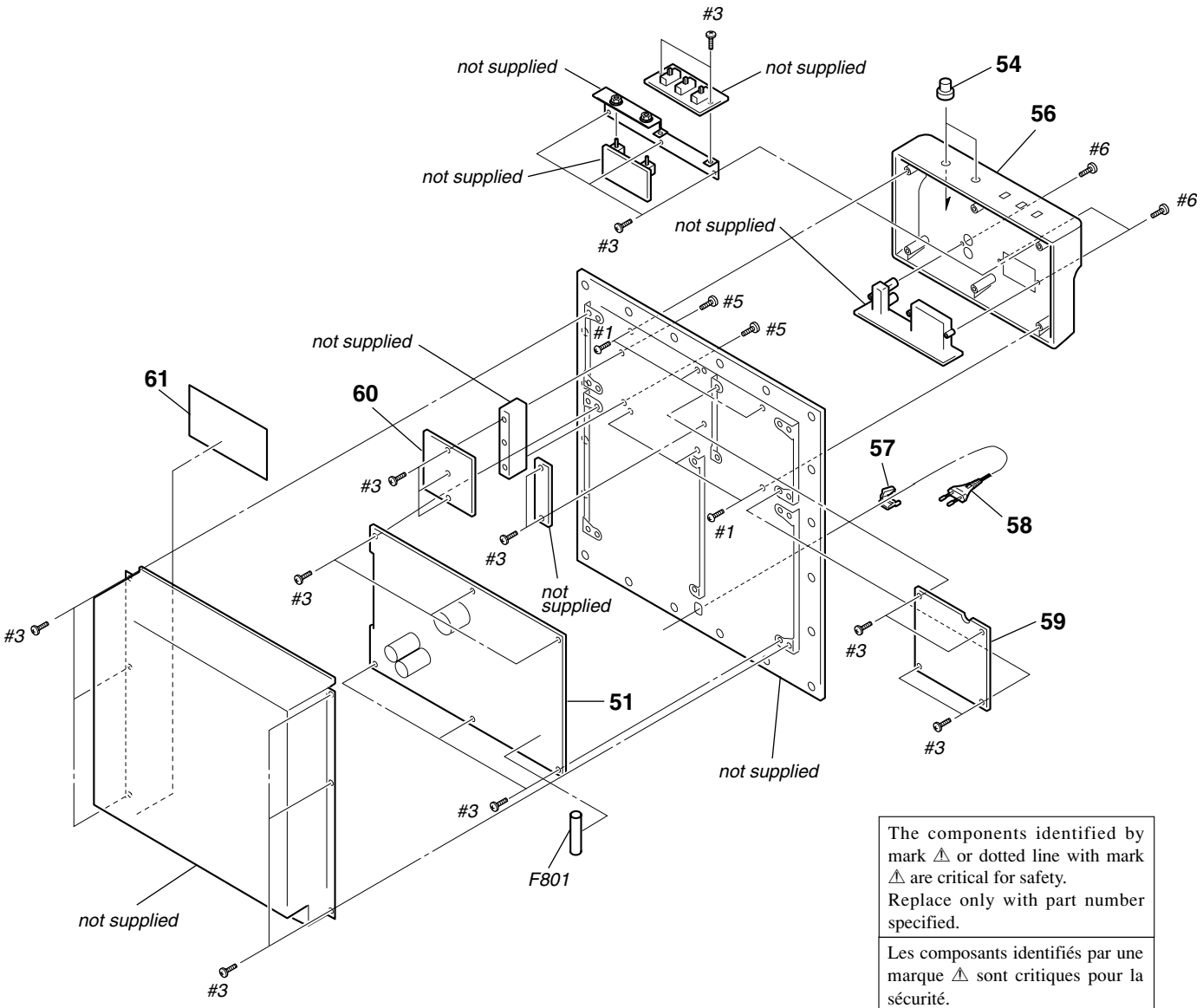
3-1. MAIN SECTION



Ref. No.	Part No.	Description	Remark
1	4-246-155-01	PANEL, SWITCH	
3	4-246-147-01	KNOB, PUSH	
5	X-4955-532-1	FRAME ASSY, GRILLE (AEP,US,CND)	
5	X-4955-584-1	FRAME ASSY, GRILLE (AEP,UK)	
6	4-246-164-01	FOOT	
7	4-210-830-01	CATCHER	
8	A-4737-335-A	BASE ASSY, UNIT	

Ref. No.	Part No.	Description	Remark
SP901	1-825-375-11	SPEAKER (25cm)	
SP902	1-825-375-11	SPEAKER (25cm)	
#1	4-229-966-11	SCREW (4X16), +BV TAPPING	
#2	4-238-407-11	SCREW (1) (4X20), +BV TAPPING	
#3	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
#4	4-235-903-01	SCREW (3.5X20)	
#5	4-229-966-01	SCREW (4X16), +BV TAPPING	

3-2. REAR PANEL SECTION



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
51	A-4734-240-A	POWER BOARD, COMPLETE (US,CND)	
51	A-4734-251-A	POWER BOARD, COMPLETE (AEP,UK)	
54	4-228-138-01	KNOB (VOL)	
56	4-246-152-01	PANEL, CONTROL	
* 57	3-703-244-00	BUSHING (2104), CORD	
⚠58	1-696-570-21	CORD, POWER (UK)	
⚠58	1-769-744-52	CORD, POWER (AEP)	
⚠58	1-783-531-11	CORD, POWER (US,CND)	
59	1-688-703-11	FILTER BOARD	

Ref. No.	Part No.	Description	Remark
60	6-700-752-01	ICE250A-SW	
61	2-148-650-01	INSULATOR PLATE	
⚠F801	1-532-504-31	FUSE (4A/250V)(AEP,UK)	
⚠F801	1-532-594-11	FUSE, GLASS TUBE (6.3A/125V)(US,CND)	
#1	4-229-966-11	SCREW (4X16), +BV TAPPING	
#3	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
#5	4-229-966-01	SCREW (4X16), +BV TAPPING	
#6	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3	

SECTION 4
ELECTRICAL PARTS LIST

CONNECTOR

CONTROL FILTER

NOTE :

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE :Metal oxide-film resistor
  F : nonflammable
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : μ , for example :
  uA.... : μ A.... , uPA.... : μ PA....
  uPB.... : μ PB.... , uPC.... : μ PC....
  uPD.... : μ PD....
- CAPACITORS
  uF : μ F
- COILS
  uH : μ H
- Abbreviation
  CND : Canadian model

When indicating parts by reference number, please include the board.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
		CONNECTOR BOARD			
		**********			
		< CONNECTOR >			
CN301	1-564-721-11	PIN, CONNECTOR (SMALL TYPE) 5P			
* CN303	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P			
		< SWITCH >			
SW301	1-786-567-11	SWITCH, SLIDE (PHASE)			
SW302	1-786-567-11	SWITCH, SLIDE (BOOST)			
SW303	1-786-567-11	SWITCH, SLIDE (POWER SAVE)			
**********					
		CONTROL BOARD			
		**********			
		< CONNECTOR >			
CN302	1-564-509-11	PLUG, CONNECTOR 6P			
		< VARIABLE RESISTOR >			
VR301	1-227-588-11	RES, VAR(LEVEL)			
VR302					
**********					
	1-688-703-11	FILTER BOARD			
		**********			
		< CAPACITOR >			
C205	1-136-174-00	MYLAR	0.56uF	5%	50V
C206	1-130-325-91	FILM	0.15uF	5%	100V
C207	1-136-175-00	MYLAR	0.68uF	5%	50V
C208	1-136-175-00	MYLAR	0.68uF	5%	50V
C209	1-136-170-00	MYLAR	0.27uF	5%	50V
C210	1-136-170-00	MYLAR	0.27uF	5%	50V
C213	1-126-964-11	ELECT	10uF	20%	50V
C214	1-126-964-11	ELECT	10uF	20%	50V
C215	1-130-329-11	FILM	0.22uF	5%	100V
C216	1-130-321-11	FILM	0.1uF	5%	100V
C218	1-130-329-11	FILM	0.22uF	5%	100V
C220	1-130-329-11	FILM	0.22uF	5%	100V
C221	1-130-321-11	FILM	0.1uF	5%	100V
C222	1-130-321-11	FILM	0.1uF	5%	100V
C223	1-126-964-11	ELECT	10uF	20%	50V
C224	1-126-964-11	ELECT	10uF	20%	50V
C225	1-130-955-00	FILM	0.01uF	5%	100V
C226	1-130-955-00	FILM	0.01uF	5%	100V
C227	1-126-964-11	ELECT	10uF	20%	50V
C229	1-126-964-11	ELECT	10uF	20%	50V

Ref. No.	Part No.	Description			Remark
C230	1-126-964-11	ELECT	10uF	20%	50V
C231	1-136-165-00	MYLAR	0.1uF	5%	50V
C232	1-136-165-00	MYLAR	0.1uF	5%	50V
C234	1-126-964-11	ELECT	10uF	20%	50V
C235	1-126-964-11	ELECT	10uF	20%	50V
C237	1-136-230-00	FILM	0.0022uF	5%	100V
C238	1-126-964-11	ELECT	10uF	20%	50V
C239	1-162-282-31	CERAMIC	100PF	10%	50V
C241	1-130-315-91	FILM	0.056uF	5%	100V
C242	1-136-173-00	MYLAR	0.47uF	5%	50V
C243	1-126-964-11	ELECT	10uF	20%	50V
C244	1-126-964-11	ELECT	10uF	20%	50V
C245	1-130-321-11	FILM	0.1uF	5%	100V
C246	1-130-321-11	FILM	0.1uF	5%	100V
		< CONNECTOR >			
* CN201	1-564-508-11	PLUG, CONNECTOR 5P			
* CN202	1-506-611-11	PIN, CONNECTOR 8P			
CN203	1-564-509-11	PLUG, CONNECTOR 6P			
* CN204	1-564-511-11	PLUG, CONNECTOR 8P			
		< IC >			
IC201	8-759-076-15	IC KIA4558P			
IC202	8-759-076-15	IC KIA4558P			
IC203	8-759-076-15	IC KIA4558P			
IC204	8-759-076-15	IC KIA4558P			
IC205	6-704-362-01	IC KIA358P			
IC207	8-759-076-15	IC KIA4558P			
		< RESISTOR >			
R201	1-249-427-11	CARBON	6.8K	5%	1/4W
R202	1-249-427-11	CARBON	6.8K	5%	1/4W
R203	1-249-429-11	CARBON	10K	5%	1/4W
R204	1-249-429-11	CARBON	10K	5%	1/4W
R205	1-249-429-11	CARBON	10K	5%	1/4W
R206	1-249-426-11	CARBON	5.6K	5%	1/4W
R207	1-249-425-11	CARBON	4.7K	5%	1/4W
R208	1-249-439-11	CARBON	68K	5%	1/4W
R209	1-249-425-11	CARBON	4.7K	5%	1/4W
R210	1-249-433-11	CARBON	22K	5%	1/4W
R211	1-249-437-11	CARBON	47K	5%	1/4W
R212	1-249-430-11	CARBON	12K	5%	1/4W
R213	1-249-432-11	CARBON	18K	5%	1/4W
R214	1-249-437-11	CARBON	47K	5%	1/4W
R215	1-249-425-11	CARBON	4.7K	5%	1/4W
R216	1-249-425-11	CARBON	4.7K	5%	1/4W
R217	1-249-427-11	CARBON	6.8K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R218	1-249-427-11	CARBON	6.8K	5%	1/4W
R219	1-249-431-11	CARBON	15K	5%	1/4W
R220	1-249-435-11	CARBON	33K	5%	1/4W
R221	1-249-433-11	CARBON	22K	5%	1/4W
R222	1-249-421-11	CARBON	2.2K	5%	1/4W
R223	1-249-421-11	CARBON	2.2K	5%	1/4W
R224	1-249-421-11	CARBON	2.2K	5%	1/4W
R225	1-249-437-11	CARBON	47K	5%	1/4W
R226	1-249-429-11	CARBON	10K	5%	1/4W
R227	1-247-887-00	CARBON	220K	5%	1/4W
R230	1-249-421-11	CARBON	2.2K	5%	1/4W
R231	1-249-429-11	CARBON	10K	5%	1/4W
R236	1-249-428-11	CARBON	8.2K	5%	1/4W
R237	1-249-429-11	CARBON	10K	5%	1/4W
R238	1-249-441-11	CARBON	100K	5%	1/4W
R239	1-249-419-11	CARBON	1.5K	5%	1/4W
**********					
	1-688-702-11	INPUT BOARD			
		**********			
		< CAPACITOR >			
C101	1-162-286-31	CERAMIC	220PF	10%	50V
C102	1-162-286-31	CERAMIC	220PF	10%	50V
C103	1-162-286-31	CERAMIC	220PF	10%	50V
C104	1-162-286-31	CERAMIC	220PF	10%	50V
C105	1-162-215-31	CERAMIC	47PF	5%	50V
C106	1-162-215-31	CERAMIC	47PF	5%	50V
C107	1-126-964-11	ELECT	10uF	20%	50V
C108	1-130-321-11	FILM	0.1uF	5%	100V
C109	1-130-321-11	FILM	0.1uF	5%	100V
C110	1-126-964-11	ELECT	10uF	20%	50V
C111	1-126-964-11	ELECT	10uF	20%	50V
		< CONNECTOR >			
* CN101	1-564-508-11	PLUG, CONNECTOR 5P			
		< DIODE >			
D101	8-719-991-33	DIODE 1SS133T-77			
D102	8-719-991-33	DIODE 1SS133T-77			
D103	8-719-991-33	DIODE 1SS133T-77			
D104	8-719-991-33	DIODE 1SS133T-77			
D105	8-719-991-33	DIODE 1SS133T-77			
D106	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC101	8-759-634-51	IC NJM4558D			
		< JACK >			
J101	1-785-795-11	JACK, PIN 2P (LINE IN/OUT)			
		< RESISTOR >			
R101	1-249-425-11	CARBON	4.7K	5%	1/4W
R102	1-249-425-11	CARBON	4.7K	5%	1/4W
R103	1-249-437-11	CARBON	47K	5%	1/4W
R104	1-249-437-11	CARBON	47K	5%	1/4W
R105	1-249-429-11	CARBON	10K	5%	1/4W
R106	1-249-429-11	CARBON	10K	5%	1/4W
R107	1-249-429-11	CARBON	10K	5%	1/4W
R108	1-249-429-11	CARBON	10K	5%	1/4W
R109	1-249-421-11	CARBON	2.2K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R110	1-249-421-11	CARBON	2.2K	5%	1/4W
R111	1-249-417-11	CARBON	1K	5%	1/4W
R112	1-249-417-11	CARBON	1K	5%	1/4W
R113	1-249-441-11	CARBON	100K	5%	1/4W
R114	1-249-441-11	CARBON	100K	5%	1/4W
R115	1-249-421-11	CARBON	2.2K	5%	1/4W
R116	1-249-421-11	CARBON	2.2K	5%	1/4W
		< TERMINAL >			
TM101	1-537-376-11	TERMINAL BOARD (SP) (SPEAKER)			
**********					
		LED BOARD			
		*********			
		< CONNECTOR >			
* CN401	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P			
		< DIODE >			
D401	8-719-061-31	DIODE SML72420CTH8F (ON/STANDBY)			
**********					
	A-4734-251-A	POWER BOARD, COMPLETE (AEP,UK)			
	A-4734-240-A	POWER BOARD, COMPLETE (US,CND)			
		**********			
		< CAPACITOR >			
⚠C801	1-117-915-11	FILM	0.1uF	10%	275V
⚠C802	1-113-915-61	CERAMIC	0.001uF	20%	250V
⚠C803	1-113-915-61	CERAMIC	0.001uF	20%	250V
⚠C804	1-113-915-61	CERAMIC	0.001uF	20%	250V
⚠C805	1-117-915-11	FILM	0.1uF	10%	275V
C806	1-100-995-11	ELECT	470µF	20%	250V (AEP,UK)
C806	1-107-398-11	ELECT	470µF	20%	200V (US,CND)
C807	1-100-995-11	ELECT	470µF	20%	250V (AEP,UK)
C807	1-107-398-11	ELECT	470µF	20%	200V (US,CND)
C808	1-126-964-11	ELECT	10uF	20%	50V
C809	1-164-159-11	CERAMIC	0.1uF		50V
C810	1-126-963-11	ELECT	4.7uF	20%	50V
C811	1-126-963-11	ELECT	4.7uF	20%	50V
C812	1-107-955-11	ELECT	100uF	20%	20V
C813	1-107-955-11	ELECT	100uF	20%	20V
C814	1-164-159-11	CERAMIC	0.1uF		50V
C815	1-126-964-11	ELECT	10uF	20%	50V
C816	1-164-081-11	CERAMIC	470PF	10%	50V
C817	1-164-159-11	CERAMIC	0.1uF		50V
⚠C818	1-117-699-11	CERAMIC	0.001uF	99%	250V
C819	1-104-665-11	ELECT	100uF	20%	25V
C820	1-104-665-11	ELECT	100uF	20%	25V
C821	1-126-964-11	ELECT	10uF	20%	50V
C822	1-126-964-11	ELECT	10uF	20%	50V
C823	1-126-968-11	ELECT	100uF	20%	50V
C824	1-126-968-11	ELECT	100uF	20%	50V
C825	1-164-159-11	CERAMIC	0.1uF		50V
C826	1-164-159-11	CERAMIC	0.1uF		50V

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Ref. No.	Part No.	Description			Remark
C828	1-100-166-11	ELECT(BLOCK)	4700uF	20%	63V
C829	1-164-159-11	CERAMIC	0.1uF		50V
C830	1-104-661-91	ELECT	330uF	20%	16V
C831	1-126-963-11	ELECT	4.7uF	20%	50V
C832	1-164-159-11	CERAMIC	0.1uF		50V
⚠C833	1-113-915-61	CERAMIC	0.001uF	20%	250V
⚠C834	1-113-915-61	CERAMIC	0.001uF	20%	250V
⚠C835	1-113-915-61	CERAMIC	0.001uF	20%	250V
C836	1-107-670-11	ELECT	10uF	20%	400V (US,CND)
C836	1-107-678-11	ELECT	4.7uF	20%	450V (AEP,UK)
C837	1-126-964-11	ELECT	10uF	20%	50V
C838	1-126-963-11	ELECT	4.7uF	20%	50V
C839	1-126-951-11	ELECT	470uF	20%	35V
C840	1-126-951-11	ELECT	470uF	20%	35V
C841	1-126-964-11	ELECT	10uF	20%	50V
C842	1-126-964-11	ELECT	10uF	20%	50V
C843	1-104-666-11	ELECT	220uF	20%	25V
C844	1-104-666-11	ELECT	220uF	20%	25V
C845	1-162-215-31	CERAMIC	47PF	5%	50V
C846	1-164-159-11	CERAMIC	0.1uF		50V
C847	1-119-886-11	CERAMIC	470PF	10%	250V
⚠C848	1-113-924-11	CERAMIC	0.0047uF	20%	250V
C849	1-164-159-11	CERAMIC	0.1uF		50V
C850	1-164-159-11	CERAMIC	0.1uF		50V
C851	1-126-948-11	ELECT	100uF	20%	35V
C852	1-164-159-11	CERAMIC	0.1uF		50V
C853	1-164-159-11	CERAMIC	0.1uF		50V
C854	1-164-159-11	CERAMIC	0.1uF		50V
C858	1-162-306-11	CERAMIC	0.01uF	20%	16V
C859	1-162-306-11	CERAMIC	0.01uF	20%	16V
C860	1-136-164-00	FILM	0.082uF	5%	50V
C865	1-102-212-00	CERAMIC	820PF	10%	500V
C866	1-102-212-00	CERAMIC	820PF	10%	500V
C902	1-126-948-11	ELECT	100uF	20%	35V
		< CONNECTOR >			
CN801	1-564-321-00	PIN, CONNECTOR (3.96MM PITCH) 2P			
* CN802	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P			
* CN803	1-506-611-11	PIN, CONNECTOR 8P			
* CN804	1-564-241-11	PIN, CONNECTOR(3.96MM PITCH)4P			
CN805	1-564-506-11	PLUG, CONNECTOR 3P			
CN806	1-757-829-11	CORD, CONNECTION			
CN807	1-757-828-11	CORD, CONNECTION			
		< DIODE >			
⚠D801	8-719-312-28	DIODE RBV-404			
D802	8-719-991-33	DIODE 1SS133T-77			
D803	6-500-683-01	DIODE DFMX-G14S			
D804	8-719-991-33	DIODE 1SS133T-77			
D805	8-719-991-33	DIODE 1SS133T-77			
D806	8-719-991-33	DIODE 1SS133T-77			
D807	8-759-234-89	IC TA76431S			
D808	8-719-054-62	DIODE 1DL42A(N)			
D809	8-719-054-62	DIODE 1DL42A(N)			
D810	8-719-054-62	DIODE 1DL42A(N)			
D811	8-719-054-62	DIODE 1DL42A(N)			
D812	8-719-991-33	DIODE 1SS133T-77			
D813	8-719-109-97	DIODE RD6.8ESB2			
D814	6-500-684-01	DIODE FMX-22S			
D815	8-719-991-33	DIODE 1SS133T-77			

Ref. No.	Part No.	Description	Remark
D816	8-719-984-80	DIODE 1SR139-200	
D817	8-719-984-80	DIODE 1SR139-200	
D818	8-719-991-33	DIODE 1SS133T-77	
D819	8-719-991-33	DIODE 1SS133T-77	
D820	8-719-921-88	DIODE MTZJ-13B	
D821	8-719-921-88	DIODE MTZJ-13B	
D822	8-719-991-33	DIODE 1SS133T-77	
D823	8-719-991-33	DIODE 1SS133T-77	
D824	8-719-991-33	DIODE 1SS133T-77	
D825	8-719-921-88	DIODE MTZJ-13B	
D826	8-719-921-88	DIODE MTZJ-13B	
D827	8-719-991-33	DIODE 1SS133T-77	
D828	6-500-675-01	DIODE DBD10G	
D829	8-719-991-33	DIODE 1SS133T-77	
D830	8-719-991-33	DIODE 1SS133T-77	
D831	8-719-991-33	DIODE 1SS133T-77	
⚠D832	8-719-991-33	DIODE 1SS133T-77	
D833	8-719-991-33	DIODE 1SS133T-77	
D836	8-719-054-62	DIODE 1DL42A(N)	
		< FUSE >	
⚠F801	1-532-504-31	FUSE (4A/250V)(AEP,UK)	
⚠F801	1-532-594-11	FUSE, GLASS TUBE (6.3A/125V)(US,CND)	
		< FUSE HOLDER >	
FH801	1-533-313-11	FUSE HOLDER	
		< TERMINAL >	
FG1	1-537-770-21	TERMINAL BOARD, GROUND	
FG2	1-537-770-21	TERMINAL BOARD, GROUND	
FG3	1-537-770-21	TERMINAL BOARD, GROUND	
FG4	1-537-770-21	TERMINAL BOARD, GROUND	
FG5	1-537-770-21	TERMINAL BOARD, GROUND	
FG6	1-537-770-21	TERMINAL BOARD, GROUND	
		< IC >	
IC801	6-704-391-01	IC MIP2E7DMY	
⚠IC802	8-759-103-87	IC uPC494C	
IC804	6-704-363-01	IC MIP0253SPSCF	
IC805	6-704-362-01	IC KIA358P	
		< COIL >	
⚠L801	1-424-977-11	LINE FILTER TRANS	
⚠L802	1-424-977-11	LINE FILTER TRANS	
⚠L803	1-439-872-11	TRANSFORMER, DC CONVERTER	
L805	1-428-923-11	COIL, CHOKE	
		< TRANSISTOR >	
Q801	8-729-037-05	TRANSISTOR KTA1266Y	
Q802	8-729-037-05	TRANSISTOR KTA1266Y	
Q803	8-729-050-51	TRANSISTOR 2SK3313	
Q804	8-729-050-51	TRANSISTOR 2SK3313	
Q805	8-729-019-00	TRANSISTOR 2SD2394-G	
Q806	8-729-037-05	TRANSISTOR KTA1266Y	
Q807	8-729-016-42	TRANSISTOR KTC3199GR-TP	
Q808	8-729-019-00	TRANSISTOR 2SD2394-G	
Q809	8-729-019-00	TRANSISTOR 2SD2394-G	
Q810	8-729-037-05	TRANSISTOR KTA1266Y	

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POWER | POWER SWITCH | RELAY

Ref. No.	Part No.	Description			Remark
Q811	8-729-016-42	TRANSISTOR	KTC3199GR-TP		
Q812	8-729-029-86	TRANSISTOR	DTC124ESA		
Q813	8-729-029-86	TRANSISTOR	DTC124ESA		
Q814	6-550-640-01	TRANSISTOR	KTA1267		
Q815	8-729-900-63	TRANSISTOR	DTA124ES		
Q816	8-729-900-63	TRANSISTOR	DTA124ES		
Q817	8-729-029-86	TRANSISTOR	DTC124ESA		
Q818	8-729-029-86	TRANSISTOR	DTC124ESA		
Q819	8-729-016-42	TRANSISTOR	KTC3199GR-TP		
		< RESISTOR >			
⚠R801	1-259-882-11	CARBON	3.3M	5%	1/4W
⚠R802	1-259-882-11	CARBON	3.3M	5%	1/4W (AEP,UK)
R803	1-249-393-11	CARBON	10	5%	1/4W
R804	1-249-431-11	CARBON	15K	5%	1/4W
R805	1-249-426-11	CARBON	5.6K	5%	1/4W
R806	1-249-429-11	CARBON	10K	5%	1/4W
R807	1-249-425-11	CARBON	4.7K	5%	1/4W
R808	1-249-429-11	CARBON	10K	5%	1/4W
R809	1-249-429-11	CARBON	10K	5%	1/4W
R810	1-249-417-11	CARBON	1K	5%	1/4W
R811	1-249-436-11	CARBON	39K	5%	1/4W
R812	1-249-417-11	CARBON	1K	5%	1/4W
R813	1-249-417-11	CARBON	1K	5%	1/4W
R814	1-249-417-11	CARBON	1K	5%	1/4W
⚠R815	1-249-441-11	CARBON	100K	5%	1/4W
R816	1-249-441-11	CARBON	100K	5%	1/4W
R817	1-249-417-11	CARBON	1K	5%	1/4W
R818	1-249-417-11	CARBON	1K	5%	1/4W
R819	1-249-441-11	CARBON	100K	5%	1/4W
R820	1-249-441-11	CARBON	100K	5%	1/4W
R821	1-249-421-11	CARBON	2.2K	5%	1/4W
R822	1-249-441-11	CARBON	100K	5%	1/4W
R823	1-249-433-11	CARBON	22K	5%	1/4W
R824	1-249-427-11	CARBON	6.8K	5%	1/4W
R825	1-247-887-00	CARBON	220K	5%	1/4W
R826	1-249-433-11	CARBON	22K	5%	1/4W
R827	1-249-441-11	CARBON	100K	5%	1/4W
R828	1-249-441-11	CARBON	100K	5%	1/4W
R829	1-249-441-11	CARBON	100K	5%	1/4W
R830	1-212-849-00	FUSIBLE	4.7	5%	1/4W
R831	1-212-849-00	FUSIBLE	4.7	5%	1/4W
R832	1-249-418-11	CARBON	1.2K	5%	1/4W
R833	1-212-857-00	FUSIBLE	10	5%	1/4W
R834	1-249-409-11	CARBON	220	5%	1/4W
R835	1-249-420-11	CARBON	1.8K	5%	1/4W
R836	1-212-857-00	FUSIBLE	10	5%	1/4W
R837	1-212-857-00	FUSIBLE	10	5%	1/4W
R838	1-249-421-11	CARBON	2.2K	5%	1/4W
R839	1-249-421-11	CARBON	2.2K	5%	1/4W
R840	1-249-403-11	CARBON	68	5%	1/4W
R841	1-247-903-00	CARBON	1M	5%	1/4W
R842	1-249-416-11	CARBON	820	5%	1/4W
R843	1-249-420-11	CARBON	1.8K	5%	1/4W
R844	1-249-417-11	CARBON	1K	5%	1/4W
R845	1-249-417-11	CARBON	1K	5%	1/4W
R847	1-249-430-11	CARBON	12K	5%	1/4W
R848	1-249-433-11	CARBON	22K	5%	1/4W
R849	1-249-433-11	CARBON	22K	5%	1/4W
R850	1-249-423-11	CARBON	3.3K	5%	1/4W
R851	1-249-435-11	CARBON	33K	5%	1/4W
R852	1-249-429-11	CARBON	10K	5%	1/4W
R853	1-249-435-11	CARBON	33K	5%	1/4W
R854	1-215-893-81	METAL OXIDE	1.5K	5%	2W
R855	1-249-440-11	RES,CARBON	82K	5%	1/4W
		< RELAY >			
RY801	1-755-503-11	RELAY			
RY802	1-515-920-11	RELAY (24V)			
		< TRANSFORMER >			
⚠T801	1-439-869-11	TRANSFORMER, DC CONVERTER			
⚠T802	1-439-871-11	TRANSFORMER, DC CONVERTER			
⚠T803	1-439-870-11	TRANSFORMER, DC CONVERTER			
⚠T804	1-439-873-11	TRANSFORMER, DC CONVERTER			
		< THERMISTOR >			
⚠THP801	1-803-916-11	THERMISTOR, NTC			
THP802	1-805-292-11	THERMISTOR, POSITIVE			
**********					
		POWER SWITCH BOARD			
		**********			
		< CAPACITOR >			
⚠C501	1-113-925-11	CERAMIC	0.01uF	20%	250V
		< CONNECTOR >			
CN501	1-564-321-00	PIN, CONNECTOR (3.96MM PITCH)2P			
		< SWITCH >			
⚠S501	1-786-566-11	SWITCH (POWER)			
**********					
		RELAY			
		*****			
C861	1-162-294-31	CERAMIC	0.001uF	10%	50V
C862	1-162-294-31	CERAMIC	0.001uF	10%	50V
**********					
		MISCELLANEOUS			
		**********			
⚠58	1-696-570-21	CORD, POWER (UK)			
⚠58	1-769-744-52	CORD, POWER (AEP)			
⚠58	1-783-531-11	CORD, POWER (US,CND)			
60	6-700-752-01	ICE250A-SW			
⚠F801	1-532-504-31	FUSE (4A/250V)(AEP,UK)			
⚠F801	1-532-594-11	FUSE, GLASS TUBE (6.3A/125V) (US,CND)			
SP901	1-825-375-11	SPEAKER (25cm)			
SP902	1-825-375-11	SPEAKER (25cm)			
**********					
		ACCESSORIES			
		**********			
	1-751-598-53	CORD, CONNECTION (PIN-PIN)			
	1-791-467-11	CORD, SPEAKER			
	4-246-165-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH)			
	4-246-165-31	MANUAL, INSTRUCTION (GERMAN, DUTCH) (AEP)			
	4-246-165-41	MANUAL, INSTRUCTION (SWEDISH, ITALIAN) (AEP)			
	4-246-165-51	MANUAL, INSTRUCTION (SWEDISH, ITALIAN) (POLISH, RUSSIAN)(AEP)			

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

MEMO

SA-WX700

SONY

SERVICE MANUAL

Ver 1.1 2004.05

US Model
Canadian Model
AEP Model
UK Model

SUPPLEMENT-1

File this supplement with the service manual.

Subject: Change of Power Board

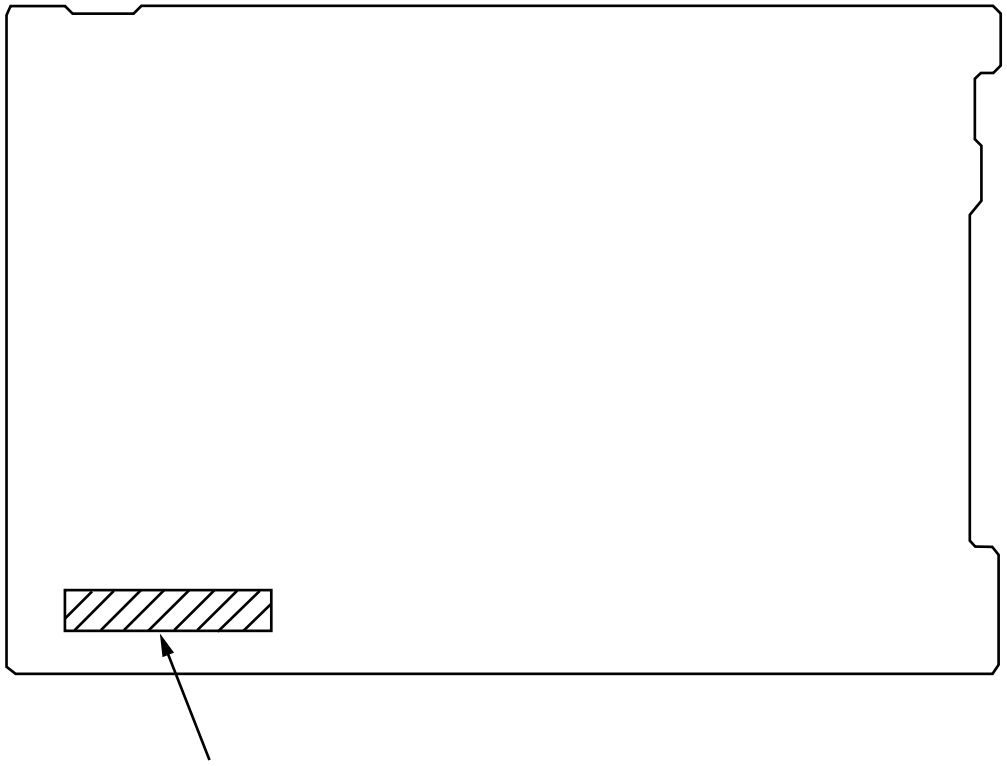
(SPM-04042)

9-877-137-81

Printed wiring board of new type is described this supplement-1.
Refer to original service manual (9-877-137-□□) previously issued for the other information. (Schematic diagram, parts list, etc.)
When performing service and inspection, check the suffix of the part number of the power boards.

• DISCRIMINATION

– POWER BOARD (SIDE A) –



POWER Board Parts No.
Former type : 1-688-700-11
New type : 1-688-700-12

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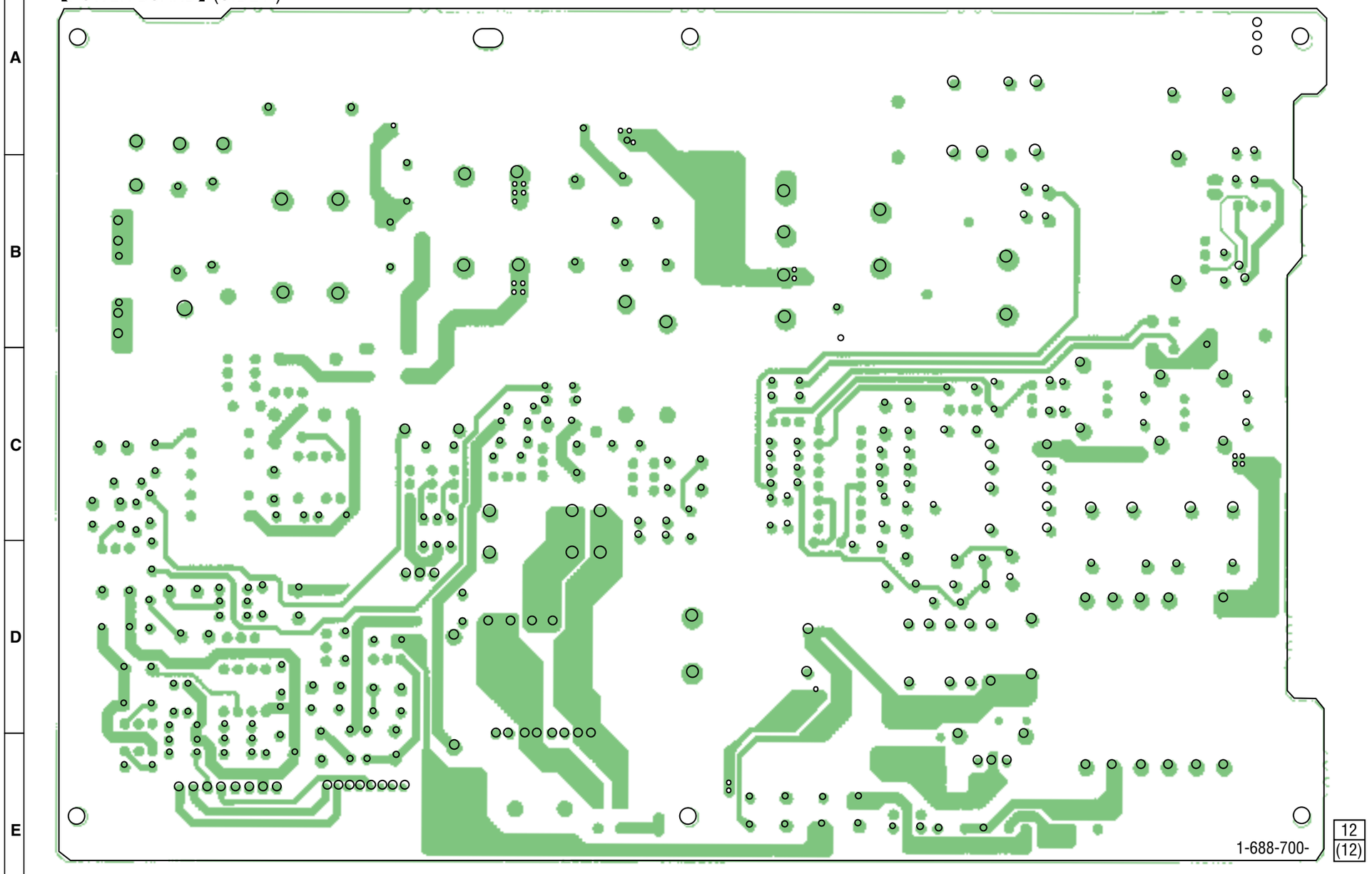
Printed Wiring Board – POWER SECTION (SIDE A) – (Refer to Service Manual page 6 for Schematic Diagram)

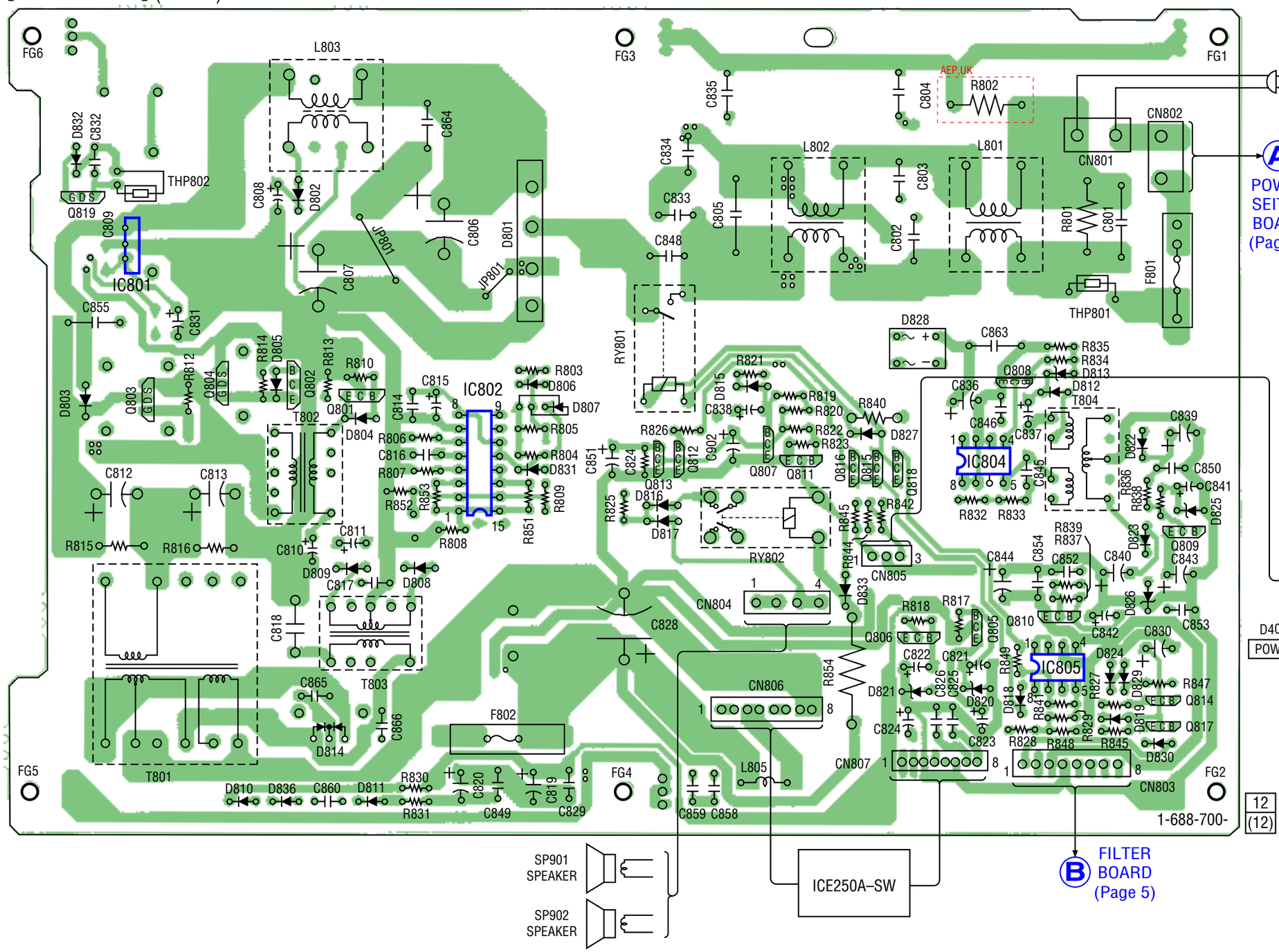
【POWER BOARD】(SIDE A)



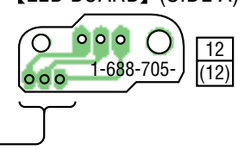
–12

Printed Wiring Board – POWER SECTION (SIDE B) – (Refer to Service Manual page 6 for Schematic Diagram)

【POWER BOARD】(SIDE B)



【LED BOARD】(SIDE A)



• **Semiconductor Location**

Ref. No.	Location
D401	D-8
D801	B-3
D802	B-2
D803	C-1
D804	C-3
D805	C-2
D806	C-4
D807	C-4
D808	D-3
D809	D-2
D810	E-2
D811	E-3
D812	C-6
D813	C-6
D814	E-2
D815	C-5
D816	C-4
D817	C-4
D818	D-6
D819	E-7
D820	D-6
D821	D-5
D822	C-7
D823	D-7
D824	D-7
D825	C-7
D826	D-7
D827	C-5
D828	B-5
D829	D-7
D830	E-7
D831	C-3
D832	A-1
D833	D-5
D836	E-2
IC801	B-1
IC802	C-3
IC804	C-6
IC805	D-6
Q801	C-2
Q802	C-2
Q803	C-1
Q804	C-2
Q805	D-6
Q806	D-5
Q807	C-5
Q808	C-6
Q809	D-7
Q810	D-6
Q811	C-5
Q812	C-4
Q813	C-4
Q814	D-7
Q815	C-5
Q816	C-5
Q817	E-7
Q818	C-5
Q819	B-1

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2003.03	New
1.1	2004.05	Parts addition to the power board. Supplement-1: Change the power board to suffix-12. (SPM-04042)
1.2	2004.05	Change of the supply classification of the screw. (ENG-04003)
1.3	2004.06	Correction of C860 Part No. and capacity. (SPM-04053)